

**Detection and Response
Tactics “DART” Early
Recognition & Surveillance
for Pandemic Flu
LMHD Pandemic Flu Summit**

Linda Goss BSN RN CIC

Director, Infection Control and Infusion Services

University of Louisville Hospital

University of Louisville

Objectives

Define surveillance and review current efforts in the community

Discuss the role of the community partner in early recognition of infectious diseases

Examine infection prevention and control in traditional and nontraditional settings

Define surveillance and review current efforts in the community

Surveillance: close observation of a person or group (usually by the police)

Surveillance of Disease: the ongoing systematic collection and analysis of data about an infectious disease that can lead to action being taken to control or prevent the disease

Syndromic Surveillance: A surveillance method based on tracking “syndromes” (often by organ system) rather than specific diagnoses, in order to recognize an unusual cluster of illnesses before diagnosis.

Define surveillance and review current efforts in the community

- **Traditional public health surveillance (reportable diseases) data collected by clinicians and reported to the LMHD via EPHRS, Phone and/or Fax**
 - **Required by law**
- **Non-traditional public health surveillance of new and emerging infectious diseases (syndromic)**
 - **Data collected by healthcare facilities and submitted electronically to LMHD epidemiologist**
 - **Voluntary**
 - **Includes data from unconventional sources**

Define surveillance and review current efforts in the community

Surveillance Syndromes

- **Cardiac**
- **Gastro-intestinal (GI)**
- **Infectious Disease (ID)**
- **Neurological (Neuro)**
- **Psychiatric (Psych)**
- **Respiratory (Resp)**
- **Other**

Objectives

Define surveillance and review current efforts in the community

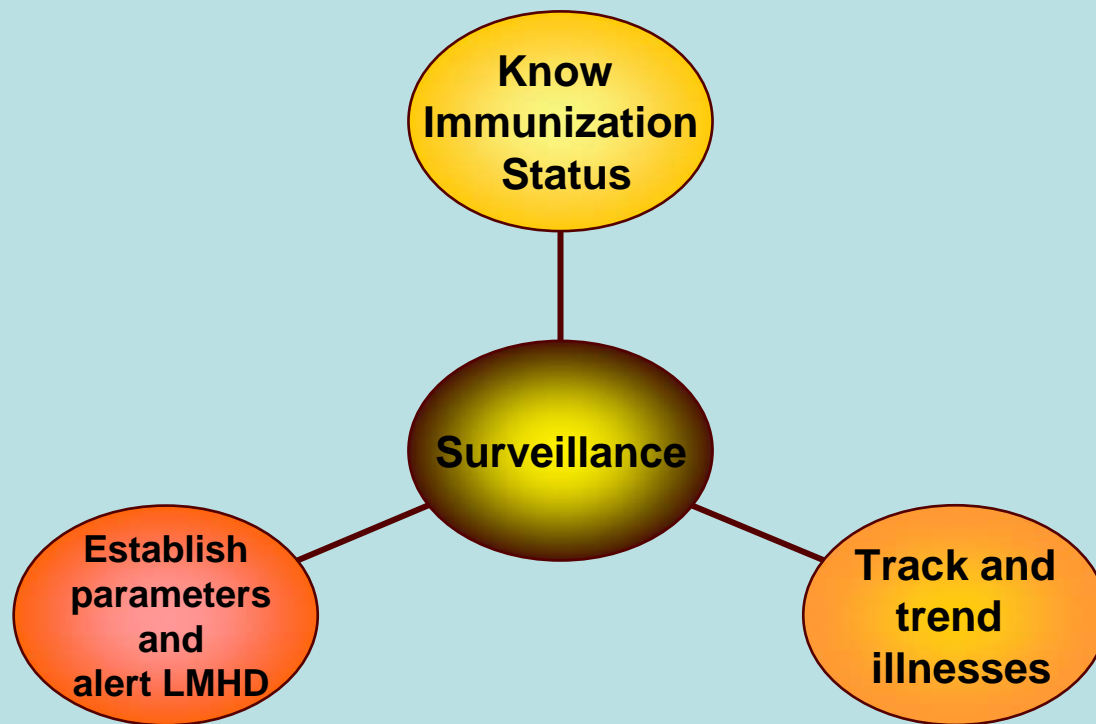
Discuss the role of the community partner in early recognition of infectious diseases

Examine infection prevention and control in traditional and nontraditional settings

Discuss the role of the community partner in early recognition of infectious diseases

- Track and trend employee and patient illnesses
- Report notable events to LMHD
- Develop specific policies and procedures for responding to a generated alert
- Know employee and patient immunization status
- Encourage influenza vaccination
- Open non-traditional communication lines with employees and patients
- Establish thresholds

Discuss the role of the community partner in early recognition of infectious diseases



D.A.R.T.

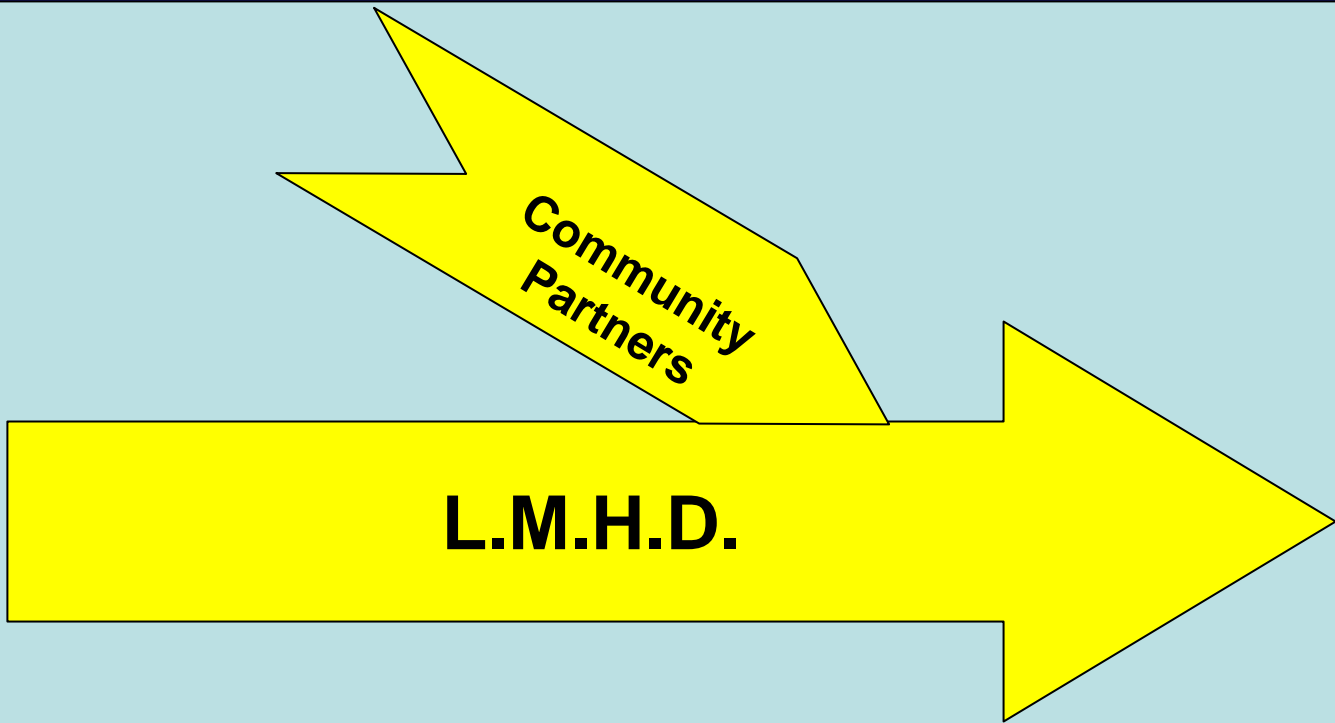


L.M.H.D.

D.A.R.T.

**Community
Partners**

L.M.H.D.

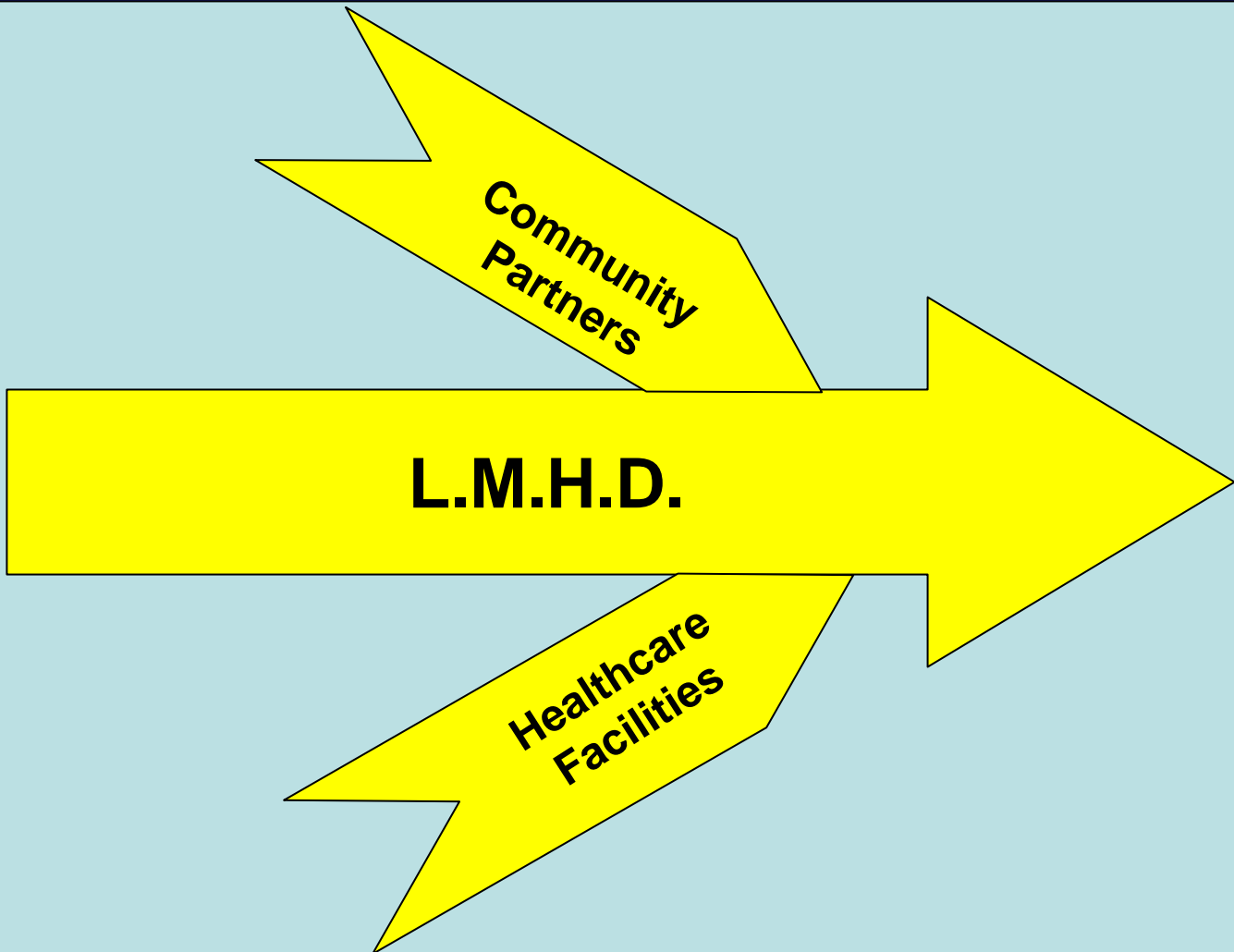


D.A.R.T.

**Community
Partners**

L.M.H.D.

**Healthcare
Facilities**



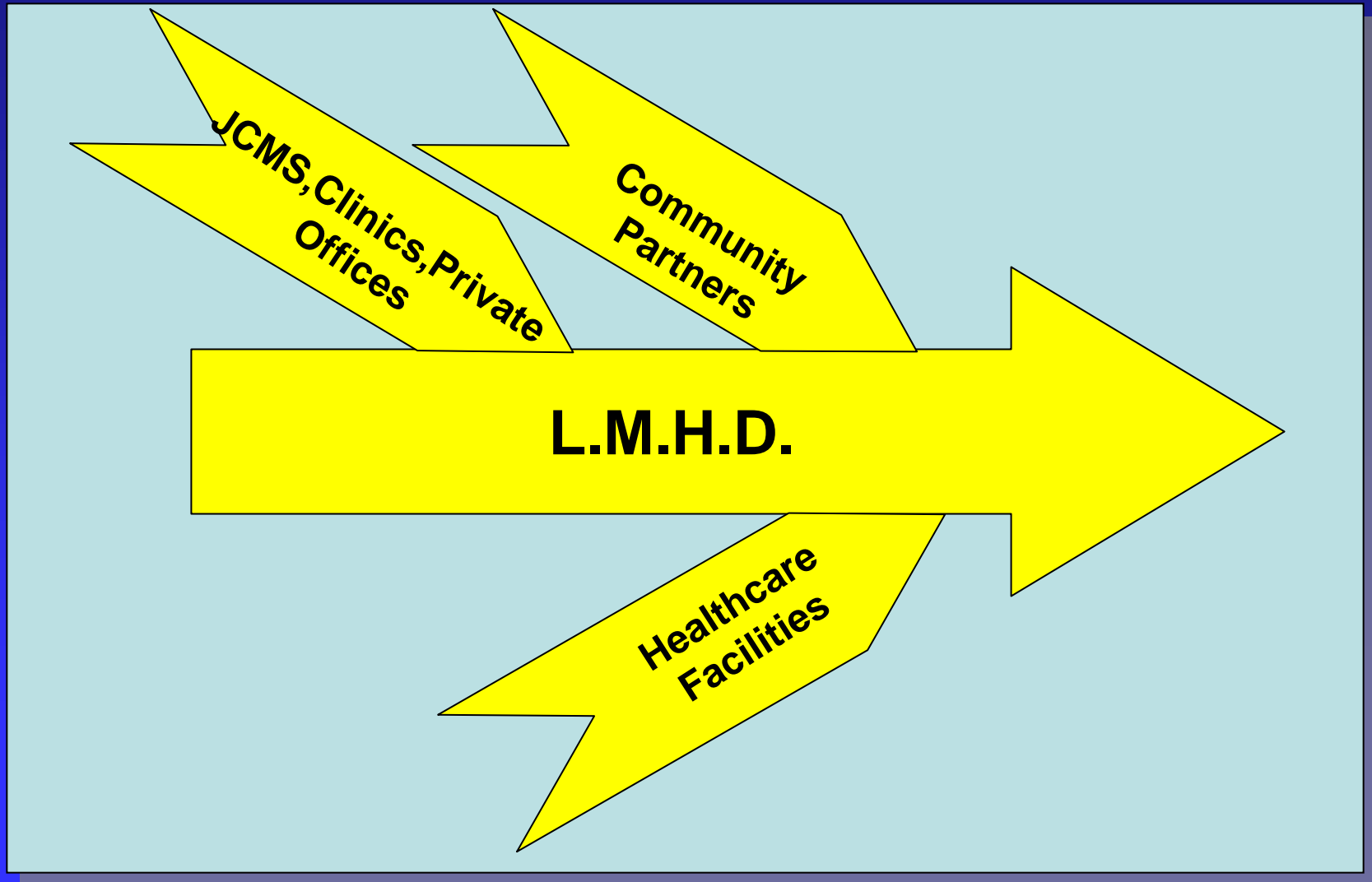
D.A.R.T.

JCMS, Clinics, Private
Offices

Community
Partners

L.M.H.D.

Healthcare
Facilities



D.A.R.T.

JCMS, Clinics, Private
Offices

Community
Partners

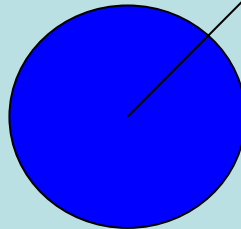
L.M.H.D.

School Systems

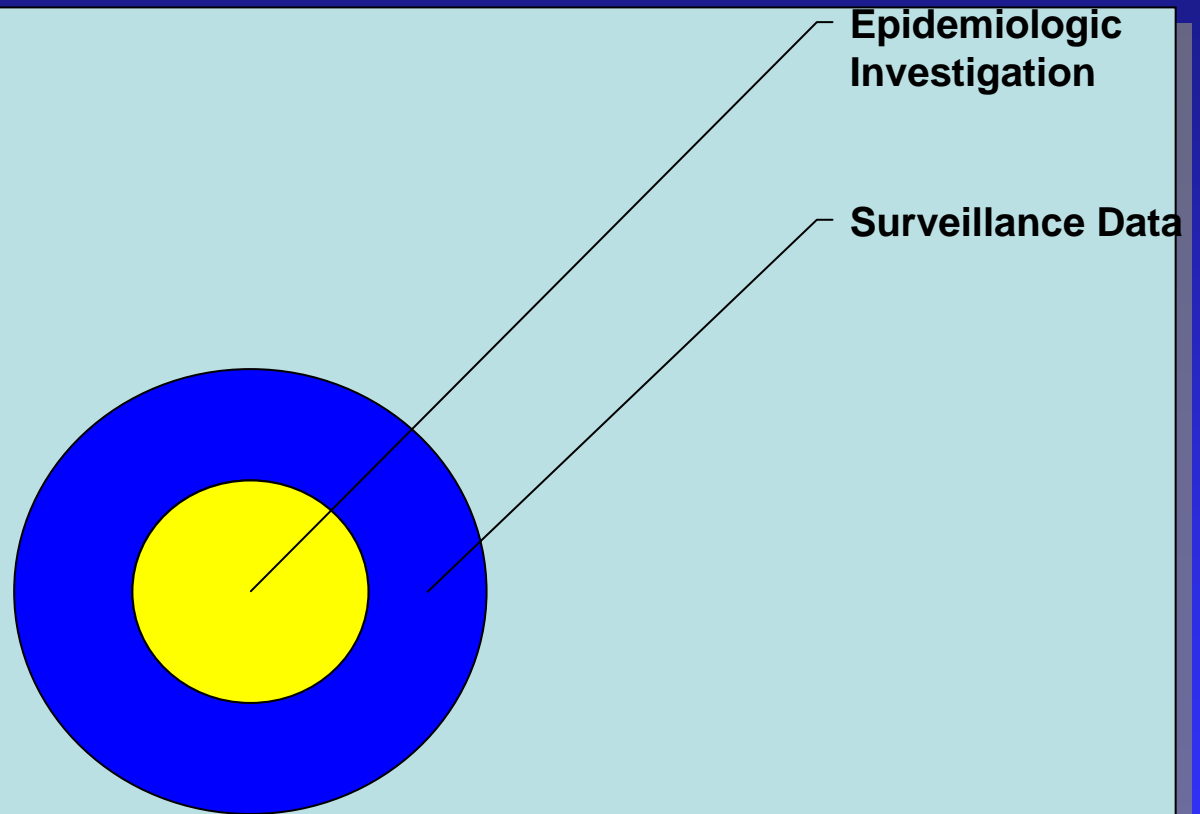
Healthcare
Facilities

D.A.R.T.

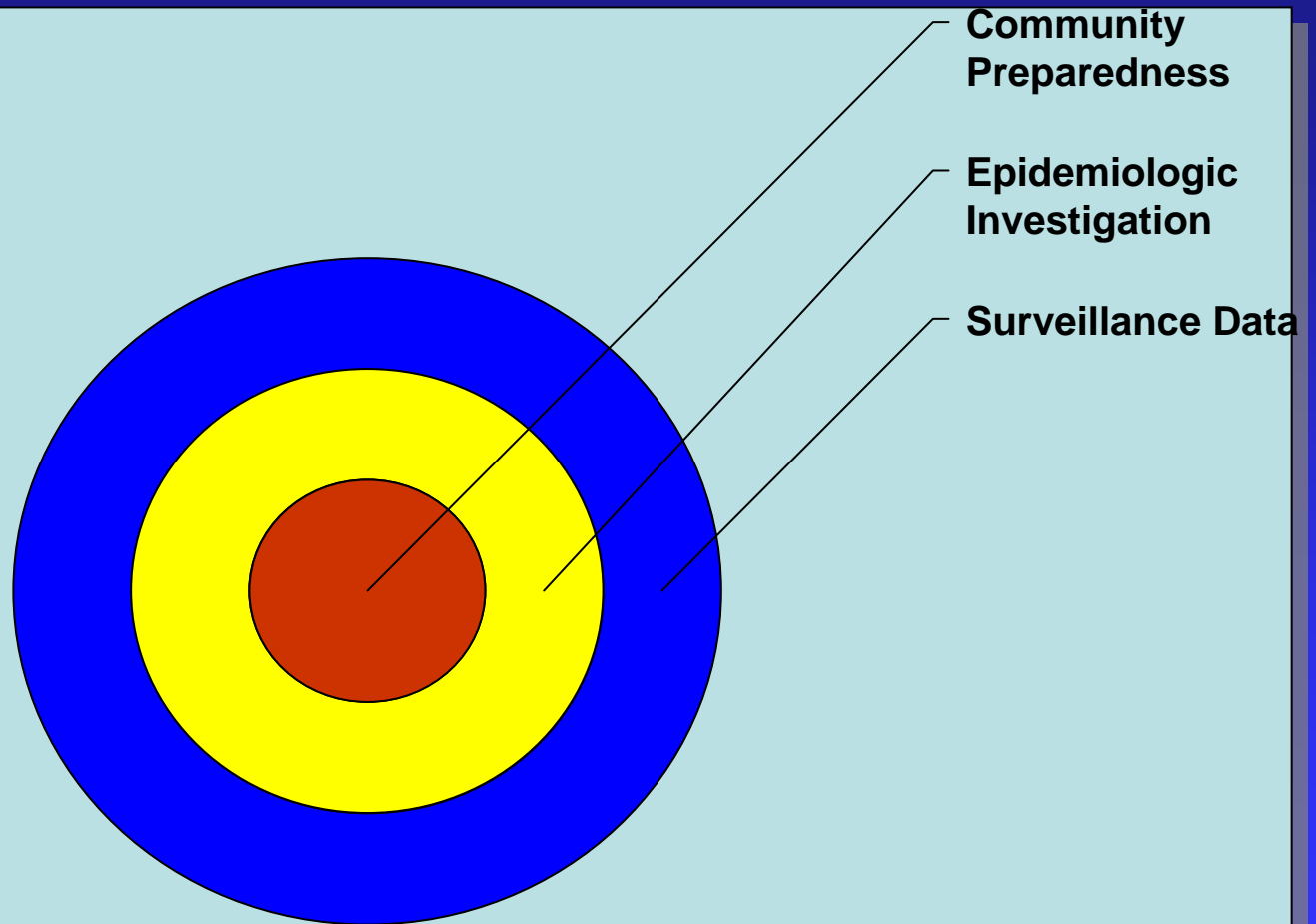
Surveillance Data



D.A.R.T.



D.A.R.T.



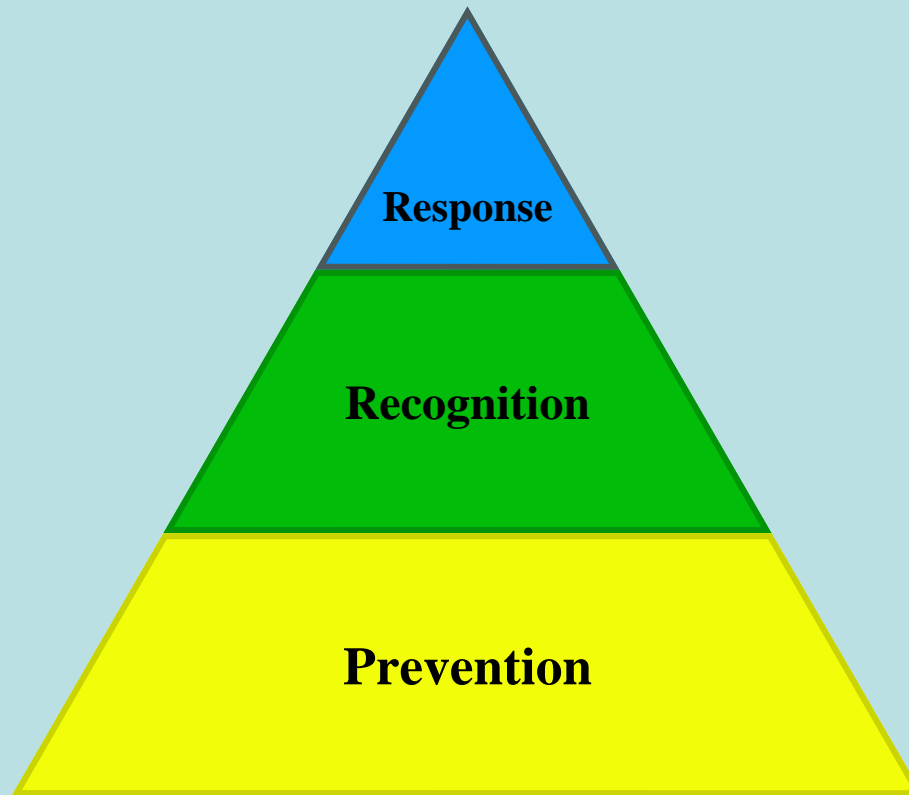
Objectives

Define surveillance and review current efforts in the community

Discuss the role of the community partner in early recognition of infectious diseases

Examine infection prevention and control in traditional and nontraditional settings

**Examine infection prevention and control in
traditional and non-traditional settings**



Best Practice for Prevention

Accessible Hand Hygiene products

Enforce use of hand hygiene products and monitor compliance

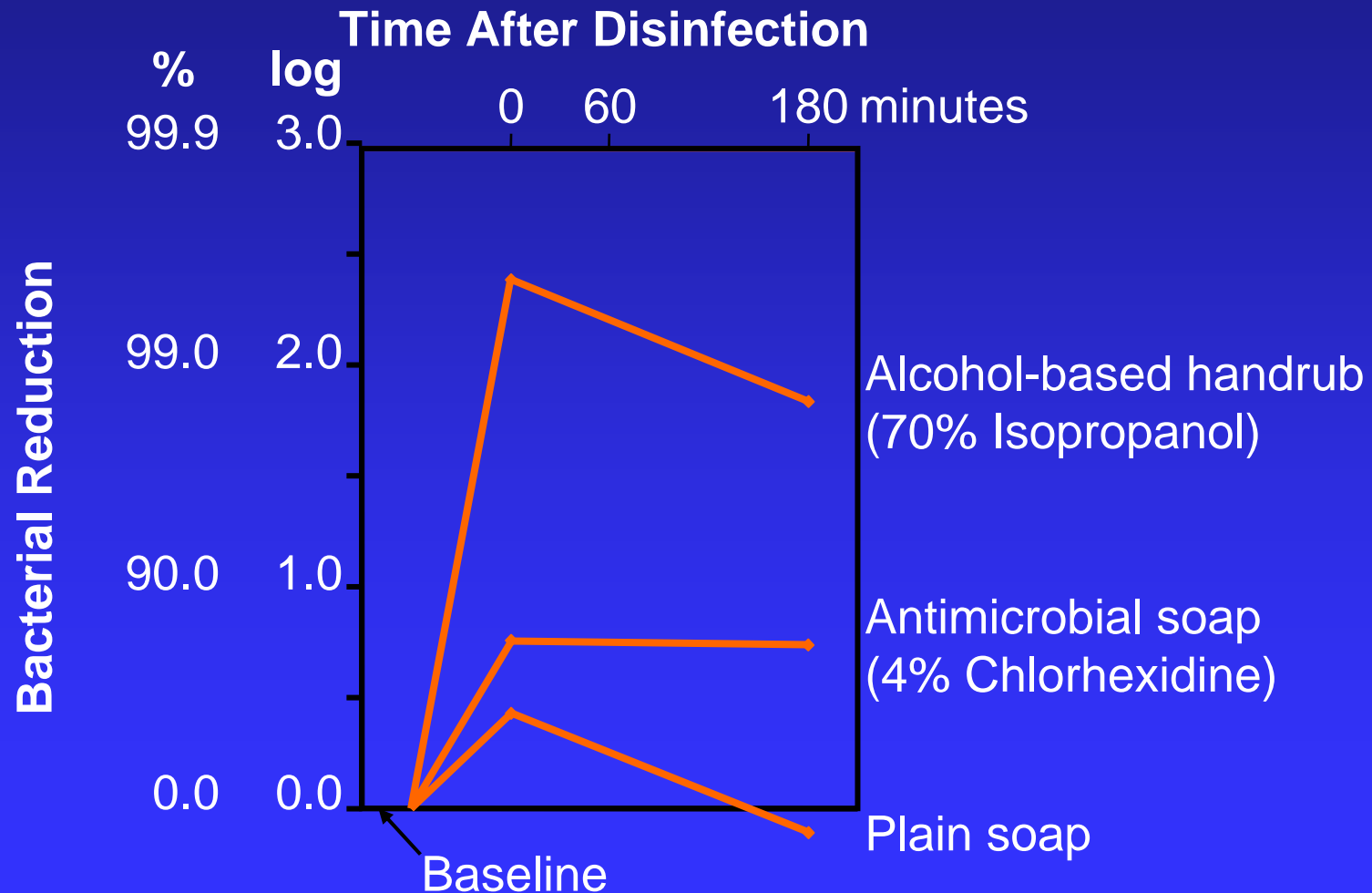
Insure the use of appropriately disinfected instruments and equipment

Practice Cough Etiquette

Segregate the sick from the well

Educate

Ability of Hand Hygiene Agents to Reduce Bacteria on Hands



Adapted from: *Hosp Epidemiol Infect Control*, 2nd Edition, 1999.

Best Practice for Recognition

Typical clinical presentation of a person with influenza may include the following:

- **Fever (usually high)**
 - **Stomach Symptoms (nausea, vomiting, and diarrhea may occur)**
 - **Headache**
 - **Extreme tiredness**
 - **Dry cough**
 - **Sore Throat**
 - **Runny or stuffy nose**
- Muscle Aches**

Best Practice for Recognition

Seasonal Flu

Outbreaks are usually seasonal and in the winter

Presumed to have previous immunity

Healthy adults usually a low risk

Health systems can usually handle

Fever, cough, runny nose, muscle pain, death due to complications

Pandemic Flu

Occurs rarely

No previous exposure, usually no immunity

Healthy people may have an increased risk for complications

Health systems may be overwhelmed

More severe symptoms and increased rate of complications

Influenza

1

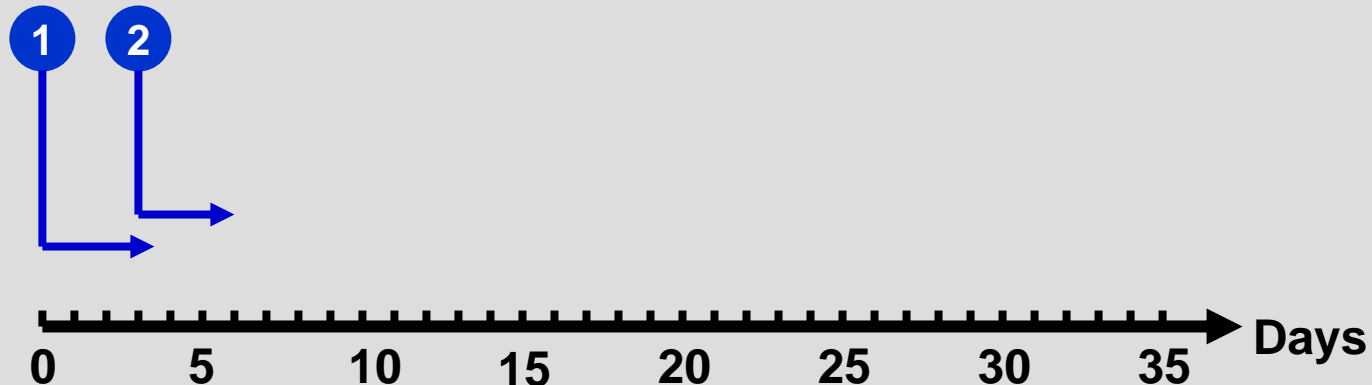
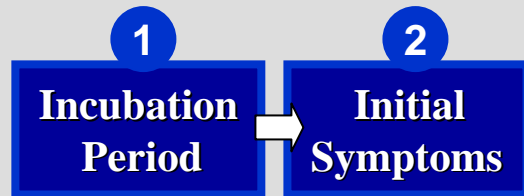
**Incubation
Period**

1



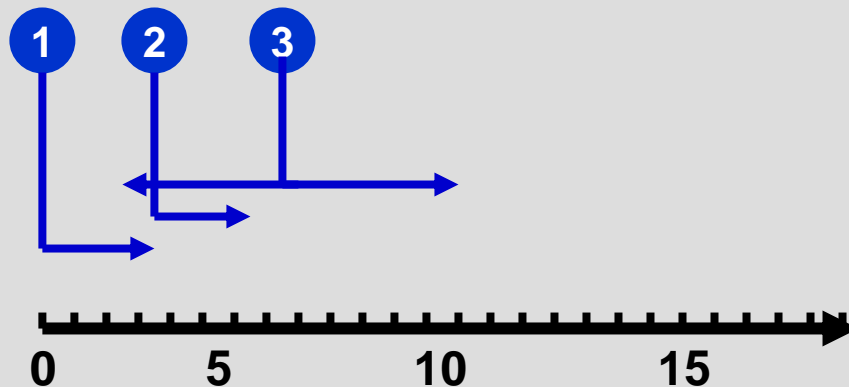
**1. Patients are asymptomatic,
average of two days**

Influenza



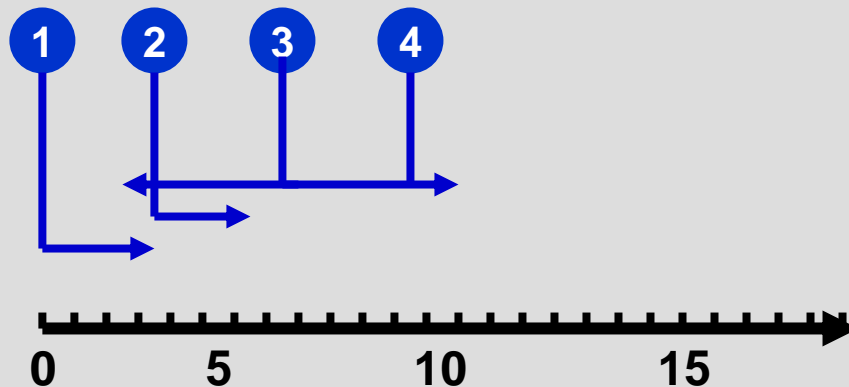
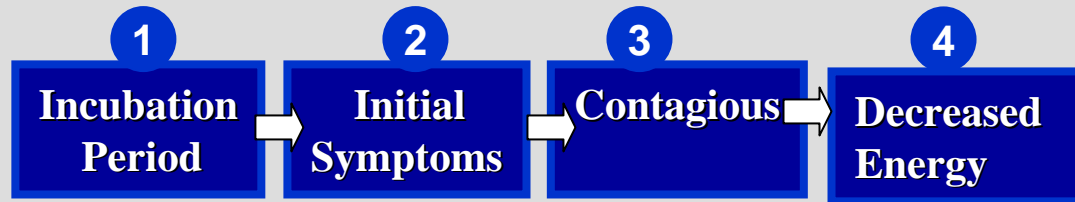
**2. Fever (101 to 104), chills, head and body aches, non-productive cough, sore throat
runny nose, overwhelming weakness
Contagious (one day before symptoms up to five days after)**

Influenza



3. Contagious a day before symptoms and possibly greater than Five days after symptom onset

Influenza








Complications may lead to a secondary pneumonia

3. Contagious a day before symptoms and possibly greater than Five days after symptom onset

Best Practices for Recognition

Surveillance Data

Fever	Cough	Fever With Cough	Gastro-intestinal
			
			
			

Best Practices for Recognition

Employee Sick Log

Employee	Complaint	Category	Location
Jones	Cough	Respiratory	Accounting
Smith	Upset Stomach	Gastro-intestinal	Packaging
Clark	Fever	Infectious Diseases	Shipping
Thomas	Cough and Fever	Infectious Diseases	Shipping

Best Practice for Response

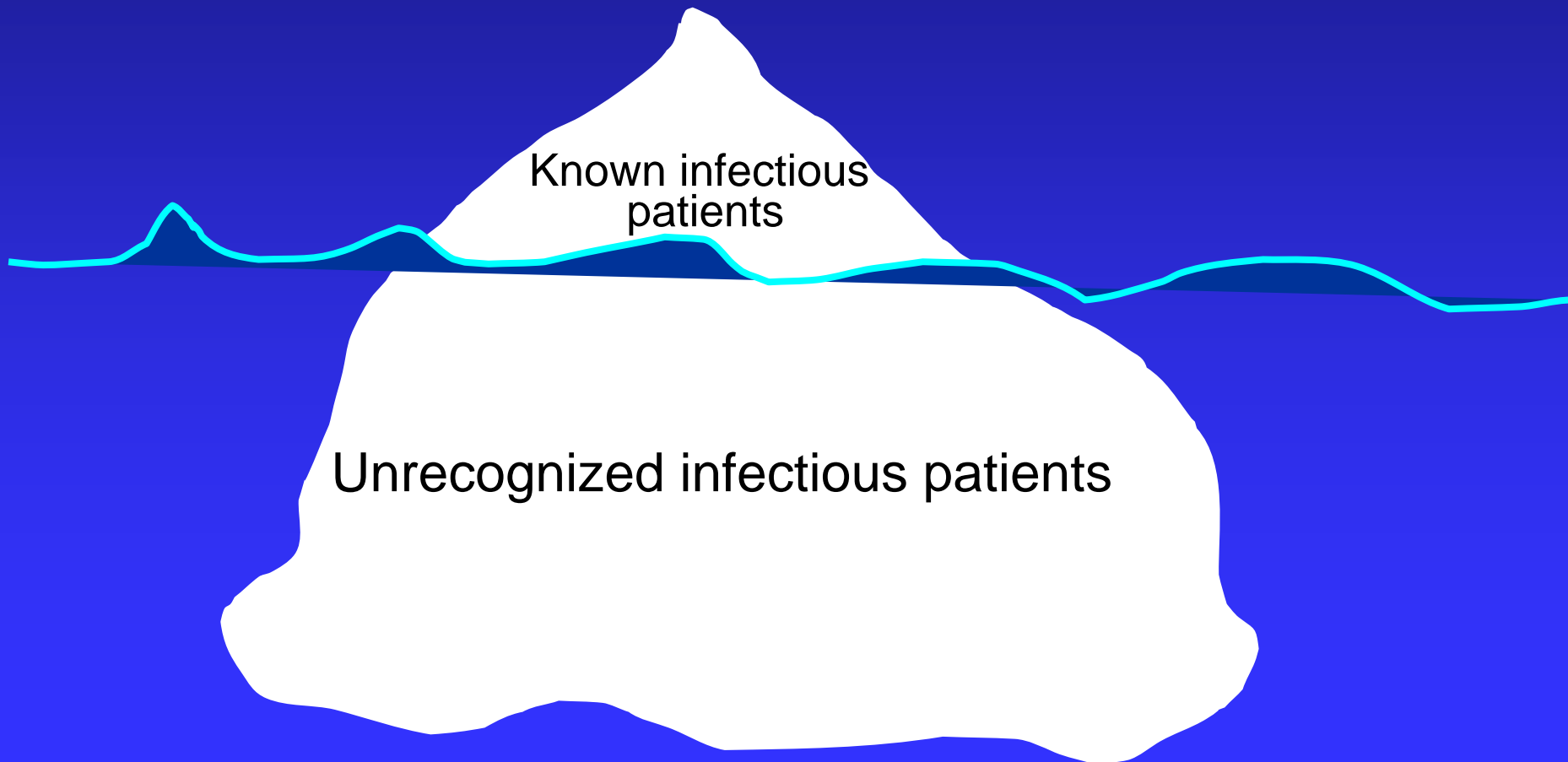
Think and practice E.P.I.

Early event detection

Protective measures

Investigation and follow-up

The Influenza Iceberg



**Tempora mutantur,
nos et mutamur in
illis**

*Times change,
and we change with them too*

Owen's Epigrammata, 1615

